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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/692,152	10/22/2003	Hiroyuki Uno	P/2041-68	5875
2352 7590 10/16/2007 OSTROLENK FABER GERB & SOFFEN 1180 AVENUE OF THE AMERICAS NEW YORK, NY 100368403			EXAMINER KIM, WESLEY LEO	
			ART UNIT 2617	PAPER NUMBER
			MAIL DATE 10/16/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/692,152	Applicant(s) UNO, HIROYUKI	
	Examiner Wesley L. Kim	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-7,9 and 10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-7,9 and 10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

This Office Action is in response to Amendment filed 7/27/07.

- Claims 1, 5, 9, and 10 are currently amended.
- Claims 4 and 8 are cancelled.
- Claims 1-3, 5-7, and 9-10 are pending in the current Office Action.

Response to Arguments

Applicant's arguments with respect to claims 1-3, 5-7, and 9-10 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-3, 5-7, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nealon et al (U.S. Patent 5463659) in view of Kim (U.S. Patent 6882860 B1) and Morgenthaler (U.S. Patent 6310609 B1).

Regarding Claims 1, 5, and 9, Nealon teaches key inputting means (Fig.2;260, keypad);

key inputting means including a plurality of keys for accepting an input of any of said keys by a user of said portable telephone set (Col.5;33-37 and Fig.2;260);

a memory for storing a menu and key allocation information (Col.5:36-39, obviously there is a menu), the key allocation information indicating whether the input of any one of said keys is valid or invalid (Fig.3:310-Fig.3:311 and Fig.3:318-Fig.3:319, obviously there is key allocation information);

key input discrimination means for discriminating whether the input of any one of said keys is valid or invalid (Fig.3:310-Fig.3:311 and Fig.3:318-Fig.3:319, the phone determines if the key input is valid or invalid so there is a key input discrimination means for discriminating whether the key inputting operation of said key inputting means is valid or invalid);

key input validity notification means operable when said key input discrimination means discriminates that the input of any one of said keys is valid for causing said call termination notification means to notify the user of the validity of the input of said any one of said keys with a first pattern set in advance (Fig.3:310-Fig.3:311, happy tone); said first pattern being different from a function performed by the input of said any one of said keys (Fig.3:310-Fig.3:311, a happy tone is different from the key inputting operation); and

key input invalidity notification means operable when said key input discrimination means discriminates that the input of any one of said keys is invalid for causing said call termination notification means to notify the user of the invalidity of the input of said any one of said keys with a second pattern set in advance and different from the first pattern (Fig.3:318-Fig.3:319, sad

tone), however, Nealon **does not expressly teach** call termination notification means and said call termination notification means functioning to notify the user of termination of a telephone call in addition to functioning to notify the user of the validity or invalidity of the input of any one of said keys and the key allocation information being updated after a change of a hierarchy of the menu, the change of the hierarchy of the menu occurring after the discrimination that the input of any one of said keys other than a power supply key is valid.

Kim teaches a call termination notification means (Col.2;67-Col.3;3 and Fig.1;117, a buzzer). Nealon must have a buzzer to produce the valid/invalid tone (Fig.3;310-Fig.3;311 and Fig.3;318-Fig.3;319) and to one of ordinary skill in the art, it is obvious that the said call termination notification means functions to notify the user of termination of a telephone call in addition to functioning to notify the user of the validity or invalidity of the input of any one of said keys.

Morgenthaler teaches that it is well known in the art that the key allocation information being updated after a change of a hierarchy of the menu, the change of the hierarchy of the menu occurring after the discrimination that the input of any one of said keys other than a power supply key is valid (Fig.4;410-Fig.4;422 and Col.6;33-52).

To one of ordinary skill in the art, it would have been obvious to modify Nealon with Kim and Morgenthaler such that the call termination notification means and said call termination notification means functions to notify the user

of termination of a telephone call in addition to functioning to notify the user of the validity or invalidity of the input of any one of said keys and the key allocation information being updated after a change of a hierarchy of the menu, the change of the hierarchy of the menu occurring after the discrimination that the input of any one of said keys other than a power supply key is valid, to provide a method of implementing the use of a buzzer to produce sounds, to notify a user of an correct/incorrect entry based on the hierarchy of the menu displayed by the phone.

Regarding Claims 2 and 6, Kim teaches said call termination notification means includes a speaker or LCD display (Fig.1;117 and Col.2;65-67).

Regarding Claims 3 and 7, the combination as discussed above teach all the limitations as recited in claims 2 and 6, however the combination is silent on the liquid crystal display device of said call termination notification means is rendered operative when said portable telephone set is used in a mode wherein no sound is generated from said foldable telephone set.

Kim teaches that an LCD display displays different call termination displays (Col.2;65-67). To one of ordinary skill in the art, it is obvious that if a phone is in a mode where no sound is generated from the portable telephone set, another means of alerting the user must be used, i.e. vibration, or various displays via LCD display.

2. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nealon et al (U.S. Patent 5463659) in view of Kim (U.S. Patent 6882860 B1),

Serrano et al (U.S. Patent 5640441), and and Morgenthaler (U.S. Patent 6310609 B1).

Regarding Claim 10, Nealon teaches key inputting means (Fig.2;260, keypad); key inputting means including a plurality of keys for accepting an input of any of said keys by a user of said portable telephone set (Col.5;33-37 and Fig.2;260); key input discrimination means for discriminating whether the input of any one of said keys is valid or invalid (Fig.3;310-Fig.3;311 and Fig.3;318-Fig.3;319, the phone determines if the key input is valid or invalid so there is a key input discrimination means for discriminating whether the key inputting operation of said key inputting means is valid or invalid); key input validity notification means operable when said key input discrimination means discriminates that the input of any one of said keys is valid for causing said call termination notification means to notify the user of the validity of the input of said any one of said keys with a first pattern set in advance (Fig.3;310-Fig.3;311, happy tone); said first pattern being different from a function performed by the input of said any one of said keys (Fig.3;310-Fig.3;311, a happy tone is different from the key inputting operation); and key input invalidity notification means operable when said key input discrimination means discriminates that the input of any one of said keys is invalid for causing said call termination notification means to notify the user of the invalidity of the input of said any one of said keys with a second pattern set in advance and different from the first pattern (Fig.3;318-Fig.3;319, sad tone), and Nealon teaches a memory (Col.6;9-12) and said key input discrimination

means using the key allocation information to discriminate whether the input of any one of said keys is valid or invalid (Fig.3;310-311 and Fig.318, if keys 1-3 are pressed then a happy tone will sound at the handset, and if any other button is pressed then a sad tone will sound) however, Nealon **does not expressly teach** call termination notification means and said call termination notification means functioning to notify the user of termination of a telephone call in addition to functioning to notify the user of the validity or invalidity of the input of any one of said keys; when the portable telephone set is used in a mode wherein no sound is generated from said portable telephone set, if the key input discrimination means discriminates that the key inputting operation is valid, then at least one of a first vibration pattern and a first color variation pattern is generated, and if the key input discrimination means discriminates that the key inputting operation is invalid, then at least one of a second vibration pattern and a second color variation pattern is generated; and allocation information updated after a change of hierarchy of the menu.

Kim teaches a call termination notification means (Col.2;67-Col.3;3 and Fig.1;117, a buzzer). Nealon must have at least a buzzer to produce the valid/invalid tone (Fig.3;310-Fig.3;311 and Fig.3;318-Fig.3;319) and to one of ordinary skill in the art, it is obvious that the said call termination notification means functions to notify the user of termination of a telephone call in addition to functioning to notify the user of the validity or invalidity of the input of any one of said keys.

Kim already teaches that if the key input discrimination means discriminates that the key inputting operation is valid, then a first pattern, and if the key input discrimination means discriminates that the key inputting operation is invalid, then a second pattern is generated and Serrano further teaches when a portable telephone set is used in a mode wherein no sound is generated from said portable telephone (i.e. silent mode), any one of a color variation pattern or vibration pattern maybe used to alert the user (Col.2;60-62, silent alarm, i.e. vibrator or a flashing light) of a call termination, to one of ordinary skill in the art, it is obvious that the vibrator and flashing lights may be used in place of the sound tones to alert the user of a condition of the mobile station such that the combination of Kim and Serrano would lead to, at least one of a first vibration pattern and a first color variation pattern being generated if the key input discrimination means discriminates that the key inputting operation is valid, and if the key input discrimination means discriminates that the key inputting operation is invalid, then at least one of a second vibration pattern and a second color variation pattern is generated.

Further, Morgenthaler teaches that it is well known in the art that the key allocation information being updated after a change of a hierarchy of the menu, the change of the hierarchy of the menu occurring after the discrimination that the input of any one of said keys other than a power supply key is valid (Fig.4;410-Fig.4;422 and Col.6;33-52).

To one of ordinary skill in the art, it would have been obvious to modify Nealon with Kim, Serrano, and Morgenthaler such that the call termination

notification means and said call termination notification means functions to notify the user of termination of a telephone call in addition to functioning to notify the user of the validity or invalidity of the input of any one of said keys; when the portable telephone set is used in a mode wherein no sound is generated from said portable telephone set, if the key input discrimination means discriminates that the key inputting operation is valid, then at least one of a first vibration pattern and a first color variation pattern is generated, and if the key input discrimination means discriminates that the key inputting operation is invalid, then at least one of a second vibration pattern and a second color variation pattern is generated; and allocation information updated after a change of hierarchy of the menu., to provide various methods of alerting the user of a certain condition (i.e. incoming call or valid/invalid key selection) of the mobile phone regardless of whether the phone is in an audible or silent mode.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory

period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wesley L. Kim whose telephone number is 571-272-7867. The examiner can normally be reached on Monday-Friday 9:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

WLK

W. E. Kylin

George Eng
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